## ORIGINAL **OPEN MEETING AGENDA ITEM**



06

## **Blessing Chukwu**

From:

Steven Olea

Sent:

Wednesday, May 17, 2006 2:48 PM

To:

Blessing Chukwu

Cc:

Dunham, Doug (dwdunham@azwater.gov)

Subject:

FW: Mohave questions

Attachments:

ACC Mohave questions.doc



ACC Mohave uestions.doc (27 K... Perkins Mountain Water Company, (W-20380A-05-0490) and Perkins Mountain Utility Company (SW-20379A-05-0489)

----Original Message----

From: Doug Dunham [mailto:dwdunham@azwater.gov]

Sent: Tuesday, May 16, 2006 4:53 PM

To: Steven Olea

Subject: Mohave questions

Steve-

attached is a written response to the letter from Blessing. I don't have her e-mail so if you could give it to me or forward this to her it would be appreciated. I will be sending the work schedule from the USGS proposal in PDF. format shortly.

Let me know if you need anything else. Doug

Douglas W. Dunham, Manager

Office of Assured and Adequate Water Supply Arizona Department of Water Resources 3550 N.

Central Ave.

Phoenix, AZ 85012 Phone: (602) 771-8590 Fax: (602) 771-8689

May 8, 2006

Blessing Chukwu Arizona Corporation Commission 1200 W. Washington Phoenix, AZ 85007

RE:

Perkins Mountain Water Company

Dear Blessing:

You had several questions regarding how the water adequacy program functions, issued and pending water adequacy applications, and general hydrologic conditions in the area surrounding Perkins Mountain Water Company, Mohave County, Arizona.

**Mohave County Applications** 

The Department has provided you a list of all known pending and issued water adequacy applications in Mohave County. This list has been compiled from ADWR's database. Where available the list includes name of the subdivision, number of lots, demand, groundwater sub-basin or basin, and water provider. You should be aware that when the Department reviews applications for water adequacy determinations, it must take into account known water users in the area. This includes existing recorded plats that may predate the water adequacy program. You should also be aware that the Department does not regulate groundwater use outside of the Active Management Areas (AMA's) and therefore the Department may not be aware of all groundwater users in the area. As we become aware of groundwater uses in a particular area we incorporate those demands into our reviews of available supplies, but this is not comprehensive.

A summary of some of the specific projects you mentioned are outlined below:

<u>Village at White Hills:</u> The Department has a pending Analysis of Water Adequacy application for the Villages at White Hills. At this time the application is considered administratively complete but incorrect. It is the Departments understanding that the applicant is currently conducting fieldwork to provide the Department additional hydrologic data. According to information submitted, the development will consist of 27,464 single-family homes, 8,000 multi-family units with 236.4 non-residential acres consisting of commercial areas, schools, parks, opens space and common areas. At this point, based upon the information currently on file with the Department, the demands are estimated to be 15,737.91 acre-feet per year. A water provider was not indicated on the application.

Ranch at White Hills: The Department issued an Analysis of Water Adequacy for the Ranch at White Hills in April of 2006. The proposed development will consist of 20,500 single-family and 4,500 multi-family units. There will be golf course and park areas within the development. The owner has indicated treated effluent will be used to water these non-residential areas. On the basis of the Department's review, the Department has determined that the applicant has demonstrated that 7,573 acre-feet per year of groundwater and 2.734 acre-feet per year of treated effluent projected at build-out will be physically available, which exceeds the applicant's projected build-out demands for the development of 7,976 acrefeet per year. The projected groundwater demand for this project (7,573 acre-feet per year) combined with the current and committed demand for existing uses and platted but undeveloped lots in the project area (3,472 acre-feet per year) results in a total groundwater demand of 11,045 acre-feet per year or 1,104,500 acre-feet after 100 years. The applicant identified Double Diamond Utilities as the possible municipal provider. However, the utility is not yet established. The application did not include a Notice of Intent to Serve form and is not within the service area boundaries of a water provider at this time. Individual Notices of Intent to Serve, evidence of the municipal provider's legal authority to serve the subdivision, and evidence of the wastewater treatment plant capacity will be required for each application for a Water Adequacy Report. Additionally, the requirements of an adequacy determination, the legal and continuous availability of the water supply, are not proven at this time. These requirements will have to be demonstrated at the time the developer applies for subsequent water reports.

Golden Valley South: The Department issued an Analysis of Water Adequacy for Golden Valley South in October of 2005. The overall master plan consisted of 32,000 single-family lots, golf courses, schools, parks, and other common areas, and over 600 acres of commercial uses. The total projected demand was estimated at 15,000 acre-feet per year. The Department found that only 9,000 acre-feet per year of groundwater was available. While the analysis application did not indicate who the municipal provider would be, it is the Departments understanding that Perkins Mountain Water Company is seeking to expand it's CC&N to include the Golden Valley South development. In addition, the Department understands that the developer is seeking preliminary plat approval from Mohave County for the initial phases of Golden Valley Ranch (Phases 1, 2, and 3). In a February 17, 2006 letter to Mohave County, the Department estimated that the first three phases would have a demand of approximately 2,447 acre-feet per year, within the 9,000 acre-feet per year determined to be available in the October 2005 analysis. Please be aware that this is a rough estimate based upon information supplied by the County, and not the final adequacy determination as required under A.R.S. § 45-108. The developer will be required to file for individual water adequacy reports for each plat in the proposed development.

Mineral Park Mine: At this time the Department is not aware of any of the specific details of the proposed expansion of Mineral Park Mine. Since the Department is not authorized to regulate specific industrial users of groundwater such as a mine outside of the AMA's the operators of the mine are not required to report current uses or seek Department approval of the proposed expansion. The Department has only become aware of the possible mine expansion through informal conversations with Mohave County.

## **Aquifer Studies**

The Department has not completed a comprehensive, aquifer wide study. The Department in conjunction with the United States Geological Survey (USGS) is initiating studies in the northern Mohave County area. The basins that will be examined are the Detrital, Hualapai, and Sacramento. Some of the initial fieldwork has been completed. However, the full studies and final reports are expected to take three to four years with completion dates projected to be in the 2009, 2010 timeframe.

## Recharge and Recovery

The Department does not require recharge and recovery of effluent, within the AMA's or outside of the AMA's. There are some existing incentives within the AMA's for effluent use, however these do not exist outside of the AMA's. Possible uses of effluent (both within the AMA's and outside of the AMA's) include the direct use of effluent to reduce the groundwater demand or an increase the physical availability of supplies by recharge and recovery of the effluent. However, the Department does not require these activities. An applicant may chose to include these types of activities in a proposed development to help augment the physical supplies. An example of this is the proposed development plan for the Ranch at White Hills. In this case the applicant chose to include direct use of effluent for landscaping uses in common areas along with other water conservation methodologies, to reduce the groundwater demand. Although recharge credits may be generated outside of the AMA's their primary use within AMA's is to meet the consistency with management goal of the AMA in the assured water supply program. No such requirement exists outside of the AMA's, so recharge and recovery activities of effluent are usually conducted to augment physical supplies or as a disposal method for the effluent.

If you have any additional questions please feel free to contact me at (602) 771-8590.

Sincerely,

Doug Dunham, Manager Office of Assured and Adequate Water Supply

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<sup>&</sup>lt;sup>1</sup> Existing incentives in the AMA include (among others): greater allowance for turf application on golf courses, and for assured water supply determinations, effluent is considered a renewable supply, and therefore assists applicants in meeting the consistency with management goal requirement in the assured water supply review.